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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 10/758,826  | 01/15/2004  | Lim Mao Ding         | 70030842-1              | 7131             |
| 7590 01/07/2005  AGILENT TECHNOLOGIES, INC. Intellectual Property Administration Legal Department, DL 429 P.O. Box 7599 |             |                      | EXAMINER                |                  |
|   |             |                      | NGUYEN, MINH T          |                  |
|   |             |                      | ART UNIT                | PAPER NUMBER     |
|   |             |                      | 2816                    |                  |
| Loveland, CO  | 80537-0599  |                      | DATE MAILED: 01/07/2005 | 5                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.  | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|--|
| Office Action Summary  |   | 10/758,826   | DING, LIM MAO  |  |  |  |
|  |   | Examiner   | Art Unit   |  |  |  |
|  |   | Minh Nguyen  | 2816   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |  |  |  |  |  |
| THE I - Exter after - If the - If NO - Failur Any r  | ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION.  sions of time may be available under the provisions of 37 CFR 1.1  SIX (6) MONTHS from the mailing date of this communication.  period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period or  re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE. | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   | ·   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   |   |  |  |  |  |  |
| 2a) <u></u> □  | This action is <b>FINAL</b> . 2b)⊠ This   | action is non-final.   |  |  |  |  |
| -  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |  |  |  |  |  |
| Dispositi  | on of Claims  |  |  |  |  |  |
| 5)□<br>6)⊠<br>7)⊠  | 4) ☐ Claim(s) 1-4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1,2 and 4 is/are rejected.  7) ☐ Claim(s) 3 is/are objected to.   |  |  |  |  |  |
| Application  | on Papers   |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>15 January 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.   |   |  |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |   |  |  |  |  |  |
| Priority u   | nder 35 U.S.C. § 119  |  |  |  |  |  |
| 12)  | Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau ee the attached detailed Office action for a list  | s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).   | on No d in this National Stage   |  |  |  |
| Attachment   | • •   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.  |   |  |  |  |  |  |
| 3) 🔲 Inform  | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date  |  | atent Application (PTO-152)  |  |  |  |

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#### **DETAILED ACTION**

### **Drawings**

1. The drawings are objected to because the RESET SIGNAL lines shown in Figs. 2 and 4 are misplaced. For example, in Fig. 2, the RESET SIGNAL line should be from the Output Register 106 to the Edge Counters 104 and 105 instead of from the Adder 105 to the Edge Counters. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation R=1 in the claim renders the claim indefinite because it conflicts with the limitation recited in claim 1, i.e., claim 1 requires R being an integer >1. In other words, there is no R can satisfy the requirement which is R=1 and R>1.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,614,869, issued to Bland.

As per claim 1, Bland discloses a frequency divider (Fig. 3, the details are shown in Figs. 4A and 4B) comprising:

an input frequency divider (Fig. 3, 2-bit divider 18) for generating an intermediate signal (CLKP) having a frequency of fi from an input signal (CLKIN) having a frequency fin, wherein fin = Rfi, R being an integer >1 (shown fi = 4fin, column 4, line 8);

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an edge counter (Fig. 4A, edge counter 61, column 4, lines 40-41) that generates a value equal to the number of edges in said intermediate signal that have occurred since a reset signal was generated (column 5, lines 19-21 and 32-39); and

an output generator (Fig. 4A, the combination of comparator 60 and flip-flop 38) that generates an output signal (CLKOUT) when said edge counter value reaches a value Q (the external programmable V, column 5, lines 19-31) and generates said reset signal (RESET).

As per claim 2, in sofar as understood, when consider CLKIN = CLKP by not including the prescaler 18 in the circuit, the recited limitation is met.

As per claim 4, the recited port reads on the port which receives the external programmable V value shown in Fig. 4A as line 50.

### Allowable Subject Matter

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 is allowable because the prior art of record fails to disclose or suggest the inclusion of positive and negative edge counters and an adder for performing the recited functions in the edge counter as specifically recited in the claim.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is **571-272-1748**. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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1/4/05

Minh Nguyen Primary Examiner Art Unit 2816